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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/587,654	06/05/2000	Scott C. Miller	2171	8911

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MILLIKEN & COMPANY
920 MILLIKEN RD (M-495)
PO BOX 1926
SPARTANBURG, SC 29304

EXAMINER	
JUSKA, CHERYL ANN	
ART UNIT	**PAPER NUMBER**
1771	

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/587,654	MILLER ET AL.	
	Examiner	Art Unit	
	Cheryl Juska	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-7,9,11-22,24,25,27-30,33,35-37,44-46,48-52,54,55 and 58* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-7,9,11-22,24,25,27-30,33,35-37,44-46,48-52,54,55 and 58* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Response to Amendment

2. The amendment filed November 17, 2004, has been entered. The claims 1, 7, 9, 18, 19, 44, 46, 48-52, 54, 55, and 58 have been amended as requested. Claims 8, 31, 32, 42, 43, and 56 been cancelled. Thus, the pending claims are 1, 4-7, 9, 11-22, 24, 25, 27-30, 33, 35-37, 44-46, 48-52, 54, 55, and 58.

3. Said amendment is sufficient to withdraw the prior art rejections set forth in sections 2-8 of the last Office Action (Final Rejection, 06/17/04). Specifically, applicant has amended claim 1 to include the limitations of claims 8, 31, 32, 42, and 43. Since the rejections of the last Office Action did not include claims 32, 42, and 43 (i.e., no prior art rejection was made for these claims), the standing rejections are hereby withdrawn. However, since this was an inadvertent omission, said amendment is insufficient to place the case in condition for allowance.

Double Patenting

4. Claim 48 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 46. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 4-7, 9, 11, 15-17, 19-22, 24, 25, 27-30, 33, 35-37,44-46, 48-52, 54, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,540,968 issued to Higgins in view of US 4,522,857 issued to Higgins and EP 048 968 issued to Porter et al. and in further view of US 5,464,584 issued to Yeh, US 5,73,030 issued to Ok, US 6,468,622 issued to Combs et al., and/or US 6,158,204 issued to Talley et al.

Higgins '968 discloses a cushioned back carpet tile with a stabilizing nonwoven backing (title). The carpet comprises a tufted primary backing having a latex pre-coat thereon (col. 3, lines 53-58). Additionally, a hot melt adhesive layer may contain a fiberglass scrim reinforcement layer (col. 4, lines 42-44). A foam cushion backing layer is bonded to the primary backing via the hot melt layer. Furthermore, a nonwoven felt layer of polyester and

polypropylene is attached to said foam cushion layer in order to stabilize the carpet (abstract). The foam cushion layer may be a polyurethane foam having a density ranging from 12-20 lbs/ft^3 (col. 6, lines 28-39). The foam layer may also have a layer of reinforcement at least partially embedded therein (col. 6, lines 2 1-27). With respect to claim 36, the Higgins '968 carpet may be patterned before or after cutting into tiles (col. 6, lines 40-42).

Thus, Higgins '968 teaches the presently claimed invention with the exception the claimed (a) face weight, (b) cushion weight and thickness, (c) non-heatset single yarn, and (d) yarn denier of about 1000-1400. With respect to the cushion with and thickness, Higgins '968 fails to explicitly teach these features. However, Higgins '857 teaches a similar carpet tile comprising a cushion layer of polyurethane foam having a thickness in the range of 0.1" to 1.0" and a basis weight of 10-60 oz/yd^2 (col. 2 lines 1-6). Specifically, Higgins '857 teaches a tufted or bonded carpet comprising a primary carpet base bonded to a foam cushion layer via an adhesive layer (abstract and col. 1, lines 26-33 and Figure 1). The adhesive layer includes a reinforcing glass scrim embedded therein (col. 1, lines 26-33 and Figure 1). The adhesive layer may be a thermoplastic (i.e., hotmelt) adhesive layer present in an amount ranging from 10-70 oz/yd^2, preferably about 50 oz/yd^2 (col. 1, lines 48-52). Higgins '857 also teaches the presence of a latex pre-coat applied to the backloops of yarns tufted into the primary backing (col. 1, lines 37-38). Thus, it would have been readily obvious to one skilled in the art to employ the foam cushion of Higgins '857 in the Higgins '968 carpet tile with the expectation of producing a sufficiently resilient, light weight cushioned carpet tile.

With respect to the claimed face weight, both Higgins patents are silent. However, the presently claimed face weight of less than 15 oz/yd^2 is well known in the art. For example,

Porter teaches a polyurethane foam backed carpet having a nylon pile face weight of 14 oz/yd (page 11, lines 22-30). Thus, it would have been obvious to one to choose a face weight as claimed in order to produce an inexpensive and light weight, yet durable and aesthetically pleasing carpet.

With respect to the claimed non-heatset singles yarn, although both Higgins patents and the Porter reference do not explicitly teach this feature, said non-heatset singles yarn is well known in the art. For example, Yeh teaches cut pile carpets can be made of heatset yarns, while loop pile carpets can be made of non-heatset yarns (col. 6, lines 1-10). Ok teaches the use of non-heatset yarns in carpets for variation in producing a pattern (col. 8, lines 40-44), while Combs teaches a carpet made of fine and coarse fibers wherein some of the fine fibers are non-heatset materials rendering heatsetting of the yarn an optional process step (col. 5, lines 16-20). Additionally, Talley discloses a self-setting yarn which obviates the need for a heatsetting step (abstract and col. 4, lines 15-16). Thus, it would have been readily obvious to one skilled in the art to employ a non-heatset singles yarn for the carpet yarn of the Higgins inventions. Motivation to do so would be the elimination of the costly heatsetting process step.

With respect to the claimed yarn denier size, applicant is hereby given Official Notice that the said denier is common in the carpet art. As such, it would have been readily obvious to one skilled in the art to select a yarn within the denier range claimed in order to produce an aesthetically pleasing and commercially successful carpet.

With respect to the limitation of claim 9, wherein the cushion layer is about 0.04 to 0.09" thick, it is asserted that the recitation of about 0.09" includes Higgins '857 teaching of 0.1".

With respect to claim 15, wherein the cushion is limited to an unfilled polyurethane, it is noted that Higgins '968 is silent about the use of fillers.

With respect to the recitations to relative functional properties of claims 35 and 37, it is asserted that said functional properties are met by the Higgins '968 disclosure of flooring comprising carpet tiles. For example, a carpet tile installation inherently has at least some degree of continuity and uniformity in appearance between tiles as recited in claims 35 and 37.

Although neither the cited prior art does not explicitly teach the physical properties of said claims, said properties are deemed to be met by the combination of art. Specifically, it is asserted that the claimed Gmax test, resilience rating, Appearance Retention Rating, color change test, pile height retention, and overall appearance change properties are met since said properties are dependent upon the chemical and structural features of the invention that is taught by the cited prior art. Thus, claims 24, 25, and 27-30 are rejected.

With respect to claim 36, the Higgins '968 carpet may be patterned before or after cutting into tiles (col. 6, lines 40-42).

With respect to claim 45, it is argued that the limitation that the carpet is jet dyed is a method limitation in an article claim. As such, it is not given patentable weight at this time since the method of dyeing does not effect the final product in a manipulative sense. In other words, any method of dyeing still produces a final product of a dyed carpet.

Therefore, claims 1, 4-7, 9, 11, 15-17, 19-22, 24, 25, 27-30, 33, 35-37,44-46, 48-52, 54, and 58 are rejected over the cited prior art.

7. Claims 12-14 and 18 are rejected under 35 USC 103(a) as being unpatentable over the

cited Higgins '968, Higgins '857, Porter, Yeh, Ok, Combs, and Talley references as applied above, and in further view of EP 309 816 issued to Turner et al.

Claims 12, 14, and 18 limit the foam cushion layer to having filler present in amounts of 110, 190, and 15 parts by weight, respectively. Neither of the Higgins patents teach the use of a filler. However, fillers in foam cushions arc very well-known in the carpet art. For example, Turner teaches the use of an inorganic filler in an amount ranging from 5-500 parts by weight (page 4, lines 54-58). Thus, it would have been obvious to include a filler in the carpets of Higgins in order to reduce the amount of foam employed and to improve flame resistance.

With respect to claim 13, which limits the cushion to a weight less than that taught by Higgins '857, it is argued that said claim is still obvious over the prior art since cushion weights within the presently claimed range are known in the art. Specifically, Turner teaches a polyurethane foam cushion layer for a carpet may range from 5-500 oz/yd^2. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to decrease the amount of foam present, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215. In this case, a decrease in the amount of foam cushion present, would result in a lighter weight carpet which is easier to handle and install. Therefore, claims 12-14 and 18 are also rejected.

8. Claim 55 is rejected under 35 USC 103(a) as being unpatentable over the cited Higgins '968, Higgins '857, Porter, Yeh, Ok, Combs, and Talley references as applied above, and in further view of US 6,089,007 issued to Hamilton et al.

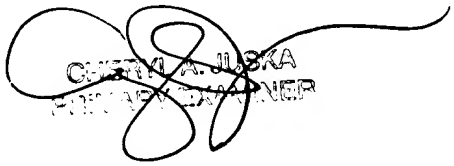
Higgins '857 and Higgins '968 are silent with respect to the use of bitumen layer as an adhesive layer of a carpet tile. However, said use is well-known in the art. For example,

Hamilton teaches adhesive layers may include vinyl resins, thermoplastic hot melts, bitumen, or modified bitumen (col. 4, lines 25-36). Thus, it would have been obvious to employ a bitumen composition as the adhesive layer of the Higgins carpet tiles with the expectation of producing a strong bond between the primary backing and the foam cushion of the carpet tile. Therefore, claim 55 is also rejected.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Juska whose telephone number is 571-272-1477. The examiner can normally be reached on Monday-Friday 10am-6pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached at 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



cj
January 21, 2005